



Docket No.: 1185 1047

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Hiroshi Yamazaki et al.

Serial No. 09/330,016

Group Art Unit: 2871

Confirmation No. 8878

Filed: June 11, 1999

Examiner: Dung Nguyen

For: SURFACE LIGHT SOURCE DEVICE OF SIDE LIGHT TYPE, LIQUID CRYSTAL  
DISPLAY AND GUIDE PLATE

**RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

This is in response to a Notification of Non-Compliant Appeal Brief, which was mailed on December 8, 2005 and set a one-month period for response, which accordingly expires on January 8, 2006.

The Notification indicates that the Brief does not contain copies of decisions rendered by a Court or Board in the proceeding identified in the related appeals and Interferences section of the Brief as an Appendix thereto. The original Appellant's Brief indicated in section II that there are no related Appeals or Interferences. Appendix C of the original Appellant's Brief was directed to copies of any decisions which existed. Appendix C indicated that no such decisions existed.

35 CFR § 41.37 indicates that the required sections of the Appeal Brief must contain "appropriate headings." It is believed that the Examiner's objection relates to Appendix C not being clearly labeled as pertaining to 35 CFR § 41.37(c)(1)(x). A replacement Appellant's Brief is being filed herewith. In the replacement Appellant's Brief, the headings for all sections have been revised to more clearly refer to the rule to which the sections relate. It is submitted that the replacement Appellant's Brief clearly contains the appendix noted by the Examiner. Accordingly, withdraw of the objection is requested.

If there are any questions regarding this response, such questions can be addressed by telephone to the undersigned.

Respectfully submitted,

STAAS & HALSEY LLP

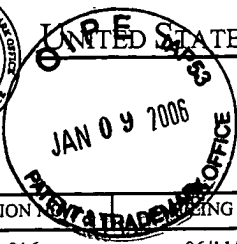
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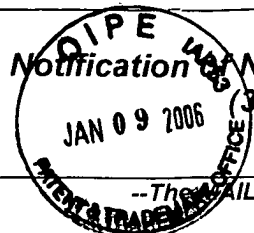
EXAMINER

ART UNIT	PAPER NUMBER
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DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

DEC 12 2005



**Notification of Non-Compliant Appeal Brief**  
(37 CFR 41.37)

Application No.	Applicant(s)	
09/330,016	YAMAZAKI ET AL.	
Examiner	Art Unit	
Dung Nguyen	2871	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The Appeal Brief filed on 09/30/2005 is defective for failure to comply with one or more provisions of 37 CFR 41.37.

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer.  
**EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.**

1. ☐ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.
2. ☐ The brief does not contain a statement of the status of all claims, (e.g., rejected, allowed, withdrawn, objected to, canceled), or does not identify the appealed claims (37 CFR 41.37(c)(1)(iii)).
3. ☐ At least one amendment has been filed subsequent to the final rejection, and the brief does not contain a statement of the status of each such amendment (37 CFR 41.37(c)(1)(iv)).
4. ☐ (a) The brief does not contain a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings, if any, by reference characters; and/or (b) the brief fails to: (1) identify, for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function under 35 U.S.C. 112, sixth paragraph, and/or (2) set forth the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification by page and line number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(v)).
5. ☐ The brief does not contain a concise statement of each ground of rejection presented for review (37 CFR 41.37(c)(1)(vi)).
6. ☐ The brief does not present an argument under a separate heading for each ground of rejection on appeal (37 CFR 41.37(c)(1)(vii)).
7. ☐ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(viii)).
8. ☐ The brief does not contain copies of the evidence submitted under 37 CFR 1.130, 1.131, or 1.132 or of any other evidence entered by the examiner **and relied upon by appellant in the appeal**, along with a statement setting forth where in the record that evidence was entered by the examiner, as an appendix thereto (37 CFR 41.37(c)(1)(ix)).
9. ☒ The brief does not contain copies of the decisions rendered by a court or the Board in the proceeding identified in the Related Appeals and Interferences section of the brief as an appendix thereto (37 CFR 41.37(c)(1)(x)).
10. ☐ Other (including any explanation in support of the above items):  
  
\_\_\_\_\_

Dung Nguyen  
Primary Examiner  
Art Unit: 2871



Attorney Docket No. 1185.1047

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Hiroshi Yamazaki et al.

Application No.: 09/330,016

Group Art Unit: 2871

Filed: June 11, 1999

Examiner: Dung Nguyen

For: SURFACE LIGHT SOURCE DEVICE OF SIDE LIGHT TYPE, LIQUID CRYSTAL  
DISPLAY AND GUIDE PLATE

**REPLACEMENT APPELLANT'S BRIEF**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In a Notice of Appeal filed May 31, 2005, the applicants appealed the Examiner's November 20, 2004, Office Action finally rejecting claims 1-10.

In response to the Final Office Action in the above-identified application, and pursuant to the Notice of Appeal filed May 31, 2005, Applicants submit this Brief with the fee of \$500.00 set forth by 37 C.F.R. §1.17(c).

**(I) Real Party In Interest (37 CFR § 41.37(c)(1)(i))**

The real parties in interest in this appeal are the assignees, Enplas Corporation and Yasuhiro Koike.

**(II) Related Appeals and Interferences (37 CFR § 41.37(c)(1)(ii))**

The undersigned attorney, the appellant and the assignees know of no related appeals or interferences which would be directly affected by or directly affect or have a bearing on the Board's decision in this appeal.

**(III) Status of Claims (37 CFR § 41.37(c)(1)(iii))**

Claims 1-10 are currently pending, claims 1-10 stand finally rejected and claims 1-10 are appealed. Claims 1-10 are each independently patentable over the prior art, as discussed in detail below, and do not stand or fall together.

**(IV) Status of Amendments (37 CFR § 41.37(c)(1)(iv))**

No amendments have been filed subsequent to the final rejection.

**(V) Summary of the Claimed Subject Matter (37 CFR § 41.37(c)(1)(v))**

The present invention relates to a surface light source device of side light type, a liquid crystal display (LCD) and a guide plate used for the devices. The specification describes these features from page 6, line 7 through page 15, line 13. Specifically, with regard to independent claims 1, 4, 7 and 10, the surface light source device is described from page 6, line 7 through page 12, line 21. According to an embodiment, referring to Figs. 1 & 2, an example surface light source device of side light type 1 comprises: a guide plate 2, a primary light source 3, a reflection sheet 4 and a flexible prism sheet 5 as a light control member. The reflection sheet 4, the scattering guide plate 2 and the prism sheet 5 are laminatedly arranged. The guide plate 2 has a wedge-like cross section with a thicker end portion having a minor face to provide an incidence end face 2A beside which the primary light source is disposed.

Referring to Figs. 3 and 4, a large number of fine scattering elements 14 are provided on the emission face 2C with rough area M spreading among the scattering elements 14. As described on page 8, line 24 through page 11, line 11, the scattering elements 14 are distributed according to a predetermined pattern. This pattern is designed depending on the degree of emission promoting power required. In areas with a great necessity, namely, in areas where brightness tends to be reduced, a high covering rate is given to avoid brightness reduction. Page 11, lines 12-19 describe the rough area M of guide plate 2. Specifically, with regard to dependent claims 2, 5 and 8, the roughness of the area M is preferably in the range of 0.02 to 0.25  $\mu\text{m}$  in arithmetic mean roughness Ra.

**(VI) Grounds Of Rejection To Be Reviewed On Appeal (37 CFR § 41.37(c)(1)(vi))**

Claims 1, 3, 4, 6, 7, 9 and 10 are rejected under 35 USC § 103(a) as being obvious over U.S. Patent No. 5,887,964 to Higuchi et al., in view of U.S. Patent No. 5,771,328 to Wortman et al.

Claims 1-10 are rejected for obviousness-type double patenting over claims 3, 6 and 9 of U.S. Patent No. 6,339,458 ("the '458 patent").

**(VII) Argument (37 CFR § 41.37(c)(1)(vii))**

**A. The Law**

**1. The Law Regarding the Obviousness Issues Raised by the Examiner**

Under Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966) the scope and content of the prior art are to be determined, the differences between the prior art and the claims at issue are to be ascertained and the level of skill in the art is to be ascertained. Against this background the obviousness of the subject matter is determined.

Obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. (see ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 USPQ 929, 932, 933 (Fed. Cir. 1984))

The prior art must not only suggest the desirability that the teachings of references be combined but must also suggest the desirability of the modifications in the manner proposed by the Examiner as well as the results to be achieved (see Ex parte Costa, 211 U.S.P.Q. 636 (P.O. Bd. App. 1978), ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984), In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984), Lear Siegler v. Aeroquip Corp., 733 F.2d 881, 221 U.S.P.Q. 1025 (Fed. Cir. 1984) and Diversitech v. Century Steps, 850 F.2d 675, 7 U.S.P.Q.2d 1315 (Fed. Cir. 1988)).

To support a finding of obviousness based on a single reference, the single reference must suggest the desirability of modifying its disclosure as needed to accomplish the invention (see In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984), Schneck v. Gordon, 713 F.2d 782, 218 U.S.P.Q. 699 (Fed. Cir. 1984) and Cooper v. Ford, 748 F.2d 677, 223 U.S.P.Q. 1286 (Fed. Cir. 1984)).

To set forth a prima facie obviousness case, evidenced motivation must be provided indicating why one skilled in the art would be motivated, lead, or suggested to modify an existing reference in view of another reference. In addition, is also improper to base a rejection on the claimed feature being merely a design choice. See *In re Garrett*, 1986 Pat. App. LEXIS 8 (Bd.

Pat. App. 1986), where the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences ("Board") specifically stated: "the examiner has not presented any line of reasoning as to why the artisan would have been motivated to so modify the... structure, and we know of none. The examiner's assertion...that the proposed modification would have been "an obvious matter of engineering design choice well within the level of skill of one of ordinary skill in the art" is a conclusion, rather than a reason." Similar discussions can be seen in *In re Chu*, 36 USPQ2d 1089 (Fed. Cir. 1985).

The Examiner bears the initial burden of establishing a prima facie case of obviousness. See *In re Rilckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is made by presenting evidence that the "reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification." *In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972); *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1984). It is incumbent on the Examiner to state how and why the teachings of the references would have been combined. "If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Any reference used to reject a claim must itself be enabling for the subject matter of the invention alleged to be taught (see *In re Wilder*, 429 F.2d 447, 166 U.S.P.Q. 545 (C.C.P.A. 1970) and *In re Collins*, 462 F.2d 538, 174 U.S.P.Q. 333 (C.C.P.A. 1972)).

It is inappropriate to rely on general principles of engineering or physics or common understanding to fill in the gaps in the teachings of a reference (see *Panduit v. Dennison*, 774 F.2d 1082, 227 U.S.P.Q. 337 (Fed. Cir. 1985) and *Akzo v. Dupont*, 810 F.2d 1148, 1 U.S.P.Q.2d 1704 (Fed. Cir. 1987)).

Factors to be considered in determining that claims are not obvious include unexpected results, new features, solution of a different problem and novel properties (see *In re Wright*, 848 F.2d 1216, 6 U.S.P.Q.2d 1959 (Fed. Cir. 1988)).



The fact that the prior art teaches away from an invention is evidence that the invention is not obvious (see *Akzo v. USITC*, 808 F.2d 1471, 1 USPQ2d 1241 (Fed.Cir.1986) and *In re Graselli*, 713 F.2d 731, 218 USPQ 769 (Fed.Cir.1983)).

"We have noted elsewhere, as a "useful general rule," that references that teach away cannot serve to create a prima facie case of obviousness. *In re Gurley*, 27 F.3d 551, 553, 31 USPQ 2d 1130 (Fed. Cir. 1994). If references taken in combination would produce a "seemingly inoperative device," we have held that such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness. *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244, 56 C.C.P.A. 823 (1969) (references teach away from combination if combination produces seemingly inoperative device); see also *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away)." (see *McGinley v. Franklin Sports Inc.*, 60 USPQ 2d 1001, 1010 (Fed. Cir. 2001)

Hindsight cannot be used in determining the issue of obviousness and the reviewer must view the prior art without reading into that art the teachings of the application or patent (see *Kalman v. Kimberly Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed.Cir.1983)).

"[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references . . . . Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher (see *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984))

An assertion that the modification or feature is an obvious matter of design choice is an unsupported conclusion and not a valid basis for the rejection of a claim (see *In re Garrett*, 33 BNA PTCJ 43 (U.S.P.T.O.Bd.App.Nov. 13,1986)).

All of the limitations in the claim must be addressed. See In re Wilder, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970) ("every limitation positively recited in a claim must be given effect in order to determine what subject matter that claim defines"); In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art.").

To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill in the art (see Continental Can Co. v Monsanto Co., 948 F.2d 1264, 20 USPQ2d 1746 (Fed.Cir. 1991)).

Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient (see In re Olerich, 666 F.2d 578, 212 USPQ 323 (CCPA 1981))

According to 37 C.F.R. § 1.56.b.2.ii (emphasis added):

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

According to Black's Law Dictionary (5th ed.), a "preponderance of evidence" is "Evidence which is of greater weight or more convincing than the evidence which is offered in opposition to it; that is, evidence which as a whole shows that the fact sought to be proved is more probable than not."

## **2. The Law Regarding the Obviousness-Type Double Patenting Issues Raised by the Examiner**

A double patenting invalidity determination must be made on a claim-by-claim basis. Ortho Pharmaceutical Corp. v. Smith, 959 F.2d 936 (Fed. Cir. 1992). Double patenting rejections are established by comparing only the claims of the issued patent with the claims of the pending application. See Reynolds Metals Co. v. Continental Group, Inc., 525 F. Supp. 950, 972 (N.D. Ill. 1981); see also In re Kaplan, 789 F. 2d 1574, 1579 (Fed. Cir. 1986) ("the patent disclosure may

not be used as prior art."). In General Foods Corp. v. Studiengesellschaft Kohle mbH, 972 F.2d 1272, 1280-81 (Fed. Cir. 1992), the court noted that a

comparison can be made only with what invention is claimed in the earlier patent, paying careful attention to the rules of claim interpretation to determine what invention a claim defines and not looking to the claim for anything that happens to be mentioned in it as though it were a prior art reference . . . Our precedent makes clear that the disclosure of a patent cited in support of a double patenting rejection cannot be used as though it were prior art, even where the disclosure is found in the claims.

In In re Aldrich, 55 C.C.P.A. 1431, 1436 (C.C.P.A., 1968), the court noted "patent claims are looked to only to see what has been patented, the subject matter which has been protected, not for something one may find to be disclosed by reading them"; see *also* In re Sarett, 51 C.C.P.A. 1180, 327 F.2d 1005, 1013, 140 USPQ 474, 481 (CCPA 1964) ("We are not here concerned with what one skilled in the art would be aware [of] from reading the claims but with what inventions the claims define.").

"The basic concept of double patenting is that the same invention cannot be patented more than once, which, if it happened, would result in a second patent which would expire some time after the original patent and extend the protection timewise. But double patenting law has always been more inclusive. Double patenting law principles extend to merely obvious variants of what has been patented. Step one of the analysis is to determine what that is. Claims are the determinants." General Foods Corp. 972 F.2d at 1280-81.

The Federal Circuit has applied a "two-way" patentability test when an inventor or assignee files a patent application claiming an improvement after a patent application claiming the basic invention, but the second-filed improvement patent issues first through no fault of the inventor or assignee. In re Braat, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991). The "two way" patentability test for obviousness-type double patenting is whether the later claimed subject matter is obvious in view of the earlier claimed subject matter *and* the earlier claimed subject matter is obvious in view of the later claimed subject matter." 3-9 Chisum on Patents § 9.03.

In other words, in order to support a finding for an obvious-type double patenting rejection, the claims of a second-filed patent must be obvious in view of the claims of a first-filed

present application *and* the claims of a first-filed present application must be obvious in view of the claims of a second-filed patent.

**B. The Rejections Under 35 USC § 103**

**1. The office Action**

In the final Office Action, the Examiner rejects claims 1, 3-4, 6-7 and 9-10 as being unpatentable over U.S. Patent Number 5,887,964 to Higuchi et al., in view of U.S. Patent Number 5,771,328 to Wortman et al. The Examiner states:

Higuchi et al. do not disclose the emission face having a light scattering element distributed, wherein the rough area having a roughness is small than that of the light scattering elements. However, Wortman et al. do disclose a guide light (film 30) in which emission face having a light scattering elements with a different roughness and the light scattering elements projected out the plane of the emission face (i.e., projected out of dashed line 39) (see figure 3). In other words, a guide light can be provided with a rough area having a small roughness (e.g. portion having small prism) and a light scattering elements having a large roughness (e.g., portion having taller prism). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to modify the Ishikawa et al. emission face having a rough area and a light scattering elements area, wherein the roughness of the rough area is smaller than that of the light scattering elements area as shown by Wortman et al. in order to obtain a display inhibiting visibly apparent optical coupling without substantially reducing the amount of light redirected toward a normal viewing axis (see Summary).

**2. The Prior Art**

U.S. Patent No. 5,887,964 to Higuchi et al. discloses a light guide plate 1 (see Fig. 1.) made of a light scattering and guiding material. The light guide plate 1 has a wedge-shaped section. See column 1, lines 23-27. Referring to column 1, lines 32 through 35, the light guide plate 1 has a side end surface on the thick side, which serves as an incident surface 2. A light source element L is disposed in the vicinity of the incident surface 2. Referring to column 1, lines 36 through 43, a reflector 3 is disposed along a back surface of the light guide plate 1. Illumination flux is emitted from the other surface (an exiting surface 5) of the light guide plate 1. A prism sheet 4 is disposed on the outside of the exiting surface 5.

U.S. Patent No. 5,771,328 to Wortman et al. describes that column 1, lines 29 through 30 that for light guiding films, it is known to place two sheets of light directing film adjacent to one another with their prisms oriented approximately perpendicular to one another to increase the

amount of light directed normal to the axis of the display. Fig. 2 of Wortman et al. shows an example of two sheets of light directing film adjacent to one another. Column 1, lines 33 through 43 describes that these two films may cause an uneven light transmission across the surface of the display. For example, the two films may cause bright spots, streaks or lines on the surface of the display. Column 2, lines 10 through 19, the reference proposes a light directing film having a first surface and an opposing structured surface which includes an array of prism elements. The array includes a repeating pattern of prism zones, which includes at least a first zone having a plurality of prism elements which have their peaks disposed at a first distance above a reference plane and a second zone having a plurality of prism elements which have their peaks disposed at a lesser distance from the reference plane.

Wortman et al. discloses various embodiments for the light directing film. Figs. 3-6 are similar in that each have light incident upon a smooth surface of the film. The smooth surface is labeled in Figs. 3, 5 and 6 respectively with reference numerals 32, 62 and 82. Fig. 7 illustrates an embodiment of the display incorporating the light directing film. Referring to column 5, line 60 through column 6, line 5, the display includes a case 112, light source 116, a first sheet of light directing film 118, a second sheet of light directing film 118', a light gating device 126, and a substantially transparent cover sheet 128. The light source 116 is an electro luminescent panel. The embodiment shown in Fig. 7 is not a sidelight type surface light source device having a guide plate with a minor face to provide an incidence and face and two major faces to provide an emission face and a back face.

Fig. 8 illustrates another embodiment of a display incorporating a light directing film. Referring to column 6, lines 20 through 28, the display includes a light source, 152, a wedge-shape light guide 154, a diffusive reflector 156, and a sheet of light directing film 158.

Column 6, lines 35 through 44 of Wortman et al. describes the light directing film may inhibit the occurrence of visible optical coupling between the light guide 154 and the light directing film 158 by controlling the proximity of the structured surface of the light directing film 158 to the light guide 154.

### 3. The Prior Art v. The Claimed Invention

As admitted by the Examiner, Wortman et al. does not disclose light scattering elements and a rough area, the rough area having a roughness less than the light scattering elements, both the light scattering elements and the rough area being provided on an emission face of a guide plate, which receives light at an incidence end face (claims 1 and 4). The Examiner cites Wortman et al. for the claimed light scattering elements and rough area. However, what the Examiner believes to be light scattering elements and a rough area in Wortman et al. are not formed on a guide plate, as claimed. That is, the light directing film 30 of Wortman et al. corresponds with the prism sheet for Higuchi et al., not the light guide plate 1 of Higuchi et al. Even if it would have been proper to combine the references, the projections 36, 38 and 42 of Wortman et al. would be incorporated into the prism sheet 4 of the Higuchi et al., not the guide plate 1.

As applicants understand it, the Examiner is arguing that Figs. 3-7 of Wortman et al. and the associated disclosure in the specification render obvious a modification to the light guide plate 1 of Higuchi et al. That is, the Examiner appears to believe that Figs. 3-7 of Wortman et al. render obvious the provision of differing height projections on the exiting surface 5 of the light guide plate 1 of Higuchi et al. Applicants disagree for two reason.

First, Figs. 3-7 of Wortman et al. do not disclose the rough surface as being provided on a light guide plate. Referring to column 5, line 64 through column 6, line 2 of Wortman et al., the light source used in the Fig. 7 device of Wortman et al. is an electro luminescent panel or a fluorescent back lighting assembly commonly used with laptop computers. In Fig. 7 of Wortman et al., the light source 116, not the light directing film 118 corresponds with the claimed guide plate.

For the second reason, let us assume that Figs. 3-7 of Wortman et al. disclose different size projections being provided on a light guide plate. Let us also assume that Figs. 3-7 of Wortman et al. and the associated disclosure suggest incorporating different sized projections into a light guide plate. Even if both of these assumptions are correct, any proper combination of the references does not produce the claimed invention. Specifically, Fig. 8 of Wortman et al. teaches away from the modification suggested by the Examiner. Fig. 8 of Wortman et al.

teaches that elements 36 and 38 should not be provided on an emission face of a light guide plate. Fig. 8 of Wortman et al. teaches that, for a light guide plate, in which the incidence face is a minor face, projections should be provided exterior to the guide plate, such as on the Wortman et al. light directing film 158.

It is also important to note that throughout the reference, Wortman et al. refers to modifying a light directing film external to the light source. For example, column 1 lines 15 through 18 state that some optical displays use a light directing film to increase the amount of light exiting the optical display. Wortman et al. describes at column 1, lines 29-33 that it is known to place two sheets of light directing from adjacent to one another with their prisms oriented approximately perpendicular to one another. Wortman et al. teaches a modification to a prism sheet. Wortman et al. does not teach a modification to a light guide plate having an incidence face, which is a minor face.

From Fig. 8, we know that Wortman et al. considered the application of their invention to a light guide plate in which an incidence face is a minor face. In Fig. 8, Wortman et al. clearly teach that this modification has projections being provided on a prism sheet 158, which is external to the light guide 154. Presumably the projections on light directing film 158 have different heights, although not specifically shown in Fig. 8. If Wortman et al. did not include Fig. 8 and the associated disclosure, then the examiner would have a stronger argument. However, because of Fig. 8, there is a clear teaching away from the combination suggested by the examiner.

Wortman et al. teaches away from combining Figs. 3-7 with Higuchi et al. as suggested by the Examiner. Fig. 8 of Wortman et al. teaches that the elements 36 and 38 should not be provided on an emission face of a light guide plate. Fig. 8 of Wortman et al. teaches that, for a guide plate, in which the incidence face is a minor face, projections should be provided exterior to the guide plate, such as on the Wortman et al. light directing film 158.

In view of the foregoing, reversal of the rejection is respectfully requested.

**C. The Double Patenting Rejection**

**1. The Office Action**

In the final Office Action, the Examiner rejects claims 1-10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 6 and 9 of U.S. Patent Number 6,339,458 to Ohkawa. The Examiner states:

Although the conflicting claims are not identical, they are not patentably distant from each other because both application and the patent disclose a surface light source device having at least two different zones with two different roughness degrees.

**2. Reasons Why The Rejection is Defective**

Double patenting rejections are established by comparing only the claims of the issued patent with the claims of the pending application. See Reynolds Metals Co. v. Continental Group, Inc., 525 F. Supp. 950, 972 (N.D. Ill. 1981). In General Foods Corp. v. Studiengesellschaft Kohle mbH, 972 F.2d 1272, 1280-81 (Fed. Cir. 1992), the court noted that a

comparison can be made only with what invention is claimed in the earlier patent, paying careful attention to the rules of claim interpretation to determine what invention a claim defines and not looking to the claim for anything that happens to be mentioned in it as though it were a prior art reference . . . Our precedent makes clear that the disclosure of a patent cited in support of a double patenting rejection cannot be used as though it were prior art, even where the disclosure is found in the claims.

The Double Patenting rejection was improperly made because the Examiner is relying upon the specifications of "both application and the patent [to] disclose a surface light source device having at least two different zones with two different roughness degrees" (quoting Examiners rejection). The Examiner's statement appears to be directed to claims 3, 6 and 9 of the '458 patent, which require that the covering density of the second emission promotion regions decrease according to distance from the incidence face. There is nothing in the claims of the present application which relates to this matter. Instead, the examiner appears to be referring to the drawings of the application. For example, perhaps the examiner is referring to Figs. 3A through 3C, 5 and 6. It is not at all clear that these drawings disclose emission promotion regions having a density that tends to decrease according to distance from the



incidence face. However, perhaps more importantly, these drawings are part of the specification, not part of the claims. While the specification may be used to determine the meaning of the claims therein (see In re Vogul, 422 F.2d 438 (CCPA 1970), the specification may not be used as prior art. In re Braat, 937 F.2d 589 (Fed. Cir. 1991). In In re Braat, Justice Rich noted,

difficulty . . . arises in all obviousness-type double patenting cases of determining when a claim is or is not an obvious variation of another claim . . . [A] claim often does not describe any particular thing but instead defines the boundary of patent protection, and it is difficult to try to determine what is a mere obvious variation of a legal boundary. . . . In determining whether one claim is patentable in view of the subject matter of another claim, it is useful to compare the one claim with a tangible embodiment which is disclosed and which falls within the scope of the other claim. *The patent disclosure must not be used as prior art.*

937 F.2d at 592-594 (emphasis added).

Double patenting rejections are established by comparing only the claims of the issued patent with the claims of the pending application. See Reynolds Metals Co. v. Continental Group, Inc., 525 F. Supp. 950, 972 (N.D. Ill. 1981); see also In re Kaplan, 789 F. 2d 1574, 1579 (Fed. Cir. 1986) ("the patent disclosure may not be used as prior art."). Therefore, because the only comparison the examiner made in regards to the claims was that they were "not identical" and the Examiner relied upon the specifications of both the application specification and the '458 patent, the Examiner failed to make a proper obvious-type double patenting rejection.

Furthermore, because the present application, filed June 11, 1999, was filed before the '458 patent, filed September 6, 2000, the two-way patentability test should be applied. See In re Braat, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991). The "two way" patentability test for obviousness-type double patenting is whether the later claimed subject matter is obvious in view of the earlier claimed subject matter *and* the earlier claimed subject matter is obvious in view of the later claimed subject matter." 3-9 Chisum on Patents § 9.03.

Claims 3, 6 and 9 of the '458 patent recite "wherein said covering density of said second emission promotion regions tends to decrease according to distance from said incidence face". The claims of the present application do not teach or suggest first and second emission promotion regions or any of the above-mentioned limitations. Therefore, claims 3, 6 and 9 of the '458 patent are not obvious in view of claims 1-10 of the present application.

Furthermore, independent claim1 of the present application, for example, recites:

a guide plate having a minor face to provide an incidence end face and two major faces to provide an emission face and a back face; and  
a primary light source providing primary light to the guide plate through the incidence end face, wherein  
said emission face is provided with a plurality of light scattering elements distributed according to a predetermined pattern,  
said emission face having a rough area formed on and around said light scattering elements such that the light scattering elements and an area surrounding the light scattering elements are roughened, and  
said rough area having a roughness degree which is less than that of said light scattering elements

Claims 3, 6 and 9 of the '458 patent do not teach or suggest "light scattering elements" and a "rough area", as recited, for example, in independent claims 1, 4, 7 and 10. Therefore, claims 1-10 are not obvious in view of claims 3, 6 and 9 of the '458 patent.

Because the later claimed subject matter is not obvious in view of the earlier claimed subject matter *and* the earlier claimed subject matter is not obvious in view of the later claimed subject matter, withdrawal of the obviousness-type double patenting is requested. The rejection fails if the claims of *either* the present application or the 458 patent is non-obvious. In the present application, *both* are non-obvious.

**D. Conclusion**

It is submitted that the Examiner has not made a prima facie case of obviousness by preponderance of the evidence and reversal of the rejection is requested. Furthermore, the Examiner improperly relied upon the specification of the '458 patent when making the obviousness-type double patenting rejection. The claims of the present application and the '458 patent distinguish over one another. Therefore, withdrawal of the obviousness-type double patenting is requested.

If any further fees are required in connection with the filing of this Appeal brief, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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**APPENDIX A – PENDING CLAIMS**  
**(37 CFR § 41.37(c)(1)(viii))**

1. (previously amended) A surface light source device of side light type comprising:  
a guide plate having a minor face to provide an incidence end face and two major faces to provide an emission face and a back face; and  
a primary light source providing primary light to the guide plate through the incidence end face, wherein  
said emission face is provided with a plurality of light scattering elements distributed according to a predetermined pattern,  
said emission face having a rough area formed on and around said light scattering elements such that the light scattering elements and an area surrounding the light scattering elements are roughened, and  
said rough area having a roughness degree which is less than that of said light scattering elements.
2. (original). A surface light source device of side light type in accordance with claim 1, wherein said rough area has roughness falling in a range from 0.02 to 0.25  $\mu\text{m}$  in arithmetic mean roughness.
3. (previously presented). A surface light source device of side light type in accordance with claim 1, wherein said light scattering elements have sizes such that the light scattering elements are hard to be visible to the naked eye.
4. (previously amended) A liquid crystal display including a liquid crystal display panel and a surface light source device of side light type for backlighting the liquid crystal display panel, said surface light source device comprising:  
a guide plate having a minor face to provide an incidence end face and two major faces to provide an emission face and a back face; and  
a primary light source providing primary light to the guide plate through the incidence end face, wherein

said emission face is provided with a plurality of light scattering elements distributed according to a predetermined pattern,

said emission face having a rough area formed on and around said light scattering elements such that the light scattering elements and an area surrounding the light scattering elements are roughened, and

said rough area having a roughness degree which is less than that of said light scattering elements.

5. (original). A liquid crystal display in accordance with claim 4, wherein said rough area has roughness falling in a range from 0.02 to 0.25  $\mu\text{m}$  in arithmetic mean roughness.

6. (previously presented) A liquid crystal display in accordance with claim 4, wherein said light scattering elements have sizes such that the light scattering elements are hard to be visible to the naked eye.

7. (previously amended) A guide plate of a surface light source device of side light type, comprising:

a minor face to provide an incidence end face for introducing light into the guide plate;  
and

two major faces to provide an emission face for emitting light and a back face opposite said emission face, wherein

said emission face is provided with a plurality of light scattering elements distributed according to a predetermined pattern,

said emission face having a rough area formed on and around said light scattering elements such that the light scattering elements and an area surrounding the light scattering elements are roughened, and

said rough area having a roughness degree which is less than that of said light scattering elements.

8. (original) A guide plate in accordance with claim 7, wherein said rough area has roughness falling in a range from 0.02 to 0.25  $\mu\text{m}$  in arithmetic mean roughness.

9. (previously presented) A guide plate in accordance with claim 7, wherein said light scattering elements have sizes such that the light scattering elements are hard to be visible to the naked eye.

10. (previously presented) A surface light source device of side light type comprising:  
a guide plate having a minor face to provide an incidence end face and two major faces to provide an emission face and a back face; and

a primary light source providing primary light to the guide plate through the incidence end face, wherein

said emission face is formed in a plane and has a plurality of light scattering elements distributed according to a predetermined pattern, the light scattering elements being formed as projections out the plane of the emission face,

said emission face having a rough area formed on and around said light scattering elements such that the light scattering elements and an area surrounding the light scattering elements are roughened and the projections out of the plane of the emission face have undulations, and

said rough area having a roughness degree which is less than that of said light scattering elements.

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**APPENDIX B – EVIDENCE EXHIBITS**  
**(37 CFR § 41.37(c)(1)(ix))**

None

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**APPENDIX C – RELATED PROCEEDINGS**  
**(37 CFR § 41.37(c)(1)(x))**

None